## REMARKS/ARGUMENTS

In the Office Action of September 11, 2009, the Examiner restricted the claims of the invention into the following Groups:

Group I, claims 1-4, 9, 19-22 and 26-39, drawn to substrates coated with Diamond-Like Carbon coating;

Group II, claims 5-8 and 10, drawn to methods of growing cells on substrates coated with Diamond-Like Carbon coating;

Group III, claim 23, drawn to methods of implanting neural cells which have been cultured on substrates coated with Diamond-Like Carbon coating;

Group IV, claims 11-14, drawn to an apparatus for detection of neural cell signals; and

Group V, claims 15-18, 24 and 25, drawn to a three-dimensional growth medium which supports growth and replication of neural cells.

The Examiner contends that the five groups of inventions I-III do not relate to a single inventive concept and do not have unity of invention, because the special technical feature which links all of the claims, namely a substrate or apparatus coated with Diamond-Like Carbon, is not novel or is obvious in view of the art. Moreover groups IV and V completely lack this feature.

Applicant respectfully disagrees with the Examiner's contention that any of the above claimed inventions are not novel, or are obvious, in view of the reference of Lu et al., as discussed by the Examiner at page 2 of the Office Action.

Notwithstanding the foregoing, Applicant elects Group I, without traverse, for examination on the merits.

## Conclusion

Applicant respectfully submits that the patent application is now in condition for examination and allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

Joseph G. Contrera, Reg. No. 44,628

LEYDIG, VOIT & MAYER

700 Thirteenth Street, N.W., Suite 300

Washington, DC 20005-3960 (202) 737-6770 (telephone)

(202) 737-6776 (facsimile)

Date: October 5, 2009

JGC/jj

H:\Joe\Cellular Bioengineering\266622\266622 Response to RR.doc